

200 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190
27080001.q MEQLRQCEAVGSLNALMAFEDDLHINFRQCRLLADACARALAAVTVQVRAQDFRDERGAKVRAIEAPLREHLRAFRDAEAIVRQCDPRGSWWRARAAAAGHTBCVBOHHLNVLWCVAVALFAHDAAGEIAGSDDELARGLVLRKYDRDMLDPLFSEHAFCKLYLVSCQIVARMDMAWKEDRWVTSQMFDEMKG
AK107091.q MEQLRQVGEALGGVNALMAFHDLLRCINFRQCALLAHAYALAFRAVAGEIRARDFRDLTKWKLDDPLREHLRVVDRDGEAVIRHGLLDPAHWWRARAAAATHGTBCVBOHHLNVLWCVAVALFAHDAAGEIAGSDDELARRRRLALARDYDKDLLDPLFSEHAFCKLYLVSCQIVARMDMAWKEDRWVTSQMFDEMKG
18408017.p MEQFRQCEVLSLNALMVLQDDI-LINRQCCLLLDIFSLGFNTVAEEIRHNLKLEBKTKWRALQPLRELYRVFKEGEVMVYVNCMSNK-DWVKVINLHQNKDCVBFHHLNLCYPSAVVIBALBTAGEISGLDSEMERRRVVSEKVDREWNDPKLFGWRFCKQYLVSRDILCRBEHSHWREDRWNLVSEALQEKRRK
15238163.p MEQFRQCEVLSLNALMVLQDDI-LINRQCCLLLELFLAFTVAEEIRHNLKLEBKTKWRALQPLRELYRVFKEGEVLVYVHGMDSN-DWVKVINLHQNKDCVBFHHLNLCYPSAVVIBALBTAGEISGLDSEMERRRVVSEKVDREWNDPKLFGWRFCKQYLVSRDILCRBEHSHWREDRWNLVSEALQEKRRK
15223409.p
lias_TGFBR
17550630.w -MIALVLLLAIVYGTTTNTLRLDCCGEBALG-MONGDIADSQITASSSFDKQSVGPONARLHSELASGAWCPKPIINSKSYBFLAVLINDTFLITSVETQGRYGNVTRGFASBYIMIDYLRPGSQWRYRKNRTHGVYMDGNFDTTPVIVLIDPPIVASRIRFVPS-SKNTRTVCMRAEIHGCKKEGVYVYVTPVDSRL
32476378.b MPRSLGFLAIESPLDPSARDARVWRVAHIKMRKAVAVRVFQMPFGQTESRQAFABEDRLKRLDIPALVYKCGGGF

400 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390
27080001.q PAAS-KHLEKNEHRLABELAAAMC-----KLPASVLSLGS-DYVVRRLDQ-RLKVVHMGESFAMKHITG-DIDAAAEVALLQSGVA-IFNVAAAYCFHDEE-----KKEFVVMQELMKRDS-SVYKVSQCFRRRIFPFLVAVDMLQIARCMBYLHAK-RINHGELNPSNVLVYKRR-QPDGGYVHKVA
AK107091.q PTSSPEPPLTRQEHRLADLAAAPRC-----KLPASVLSLMS-DFEVRRLRGGNGLKEVQALGEAPAVKHVGVDAEAAAEEVRAADAGVSP-IFNVAAHCRYCFHDEE-----KKEFVVMQELMKRDS-SVYKVSQCFRRRIFPFLVAVDMLQIARCMBYLHAK-RINHGELNPSNVLVYKRR-QPDGGYVHKVA
18408017.p SKSD--EIGKTEKRLADFLMKLTLGLEQFNKGLFPSSILVGSKDYQVRRRLDGGGQYKIKIQ-LGDSFVLRHFFG-DDEPLNABTSSLDLSC--HSNLIQYLCCGYDDEE-----RKECSLVMELMKRDLKSYMKENCGFRRRILFVSVVVIDIMLQIARCMBYLHAK-RIFHGDLNPMNILLKERSHTEG-VFHAKIS
15238163.p SDSD--DIKTEKRLADFLMKLTLGLEQFNKGLFPSSILVGSKDYQVRRRLDGGGQYKIKIQ-LGDSFVLRHFFG-DDEPLNABTSSLDLSC--HSNLIQYLCCGYDDEE-----RKECSLVMELMKRDLKSYMKENCGFRRRILFVSVVVIDIMLQIARCMBYLHAK-RIFHGDLNPMNILLKERSHTEG-VFHAKIS
15223409.p -----MADEFLMKHLQDGNESP-KLPSSSLDNNKDYQVRRRLDGGGQYKIKIQ-LGDSFVLRHFFG-DIDALLEQITPLLSLS--HENIVYVLCGDFDEE-----RKECSLVMELMKRDLKSYMKENCGFRRRILFVSVVVIDIMLQIARCMBYLHAK-RIFHGDLNPSNVLVYKRR-QPDGGYVHKVA
lias_TGFBR EDPSLDRPFISBETLKDLYDMTTSGSGSGLLVLVORTLARTIVLQESIGKRFGEVWRGKRGEEVAVKLSRREERSWFRFABLYQVMLRHEHNLGFAADNKNG-TWTQLLVSDYHEHGSFDFLNRYIVTVEGMKLALSTAGSLAHHEMIVGTQCKPALAHRLKSKNILLVKKNG-----TCGLA
17550630.w DTLDFKDSMFDQSILYDSGKIKRYSWFANRRFRSAASPEFKMNMNSWIGWNRDITDGRHTLPEEVEVHNDVVLATGNRRDCHDVPFSQDGLTFLFSLQISSSEQLNNTSRRYDFRVLHNRAGRKVVISIKFSSDMFLTEVHTSAANILLSEKIPPPSSAAATQOQLVVCGLIFLITIFACVAYQSVGCK
32476378.b ESEAYLAHELVEGSLABELD-RRRLPWSVLELAEELLDALMYLHLDRIVHGRITPDKVITAEISVLDVDRVDGTPPFRSGPYVSRP---PSIQMRSAPAEAP---TFNDVVIARTDYLFGALLREALTGAAPPITGSTVQVYTSNLYQSPTSVASTVMECPVMDRIVMQLNKNKDPGRPVSAALAKLALA

600 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590
27080001.q CVQOPACHTAGGAKASANGNANGNDNSCIYAEVLR--SDGVADAAAARQCBKADVYSFAMIFELLTCKVPEFEDNHLQGDKSKNLCAGRLFFFOAPK-YLTAETKRC-HADPAORLAFASIOR-VLRYVKRFLILNPEQQQQQQGGTDDAPKPAVDYLDIEAQLLKLPAWRGGGAFRVADVFPQMFAY
AK107091.q CF-----VSGSSTAN-AANPCI-CAPEVVG-NEAAA-----TEKSDVYSFQMI-FELITCKVPEFEDNHLQGBNMSKNIRAGRLFFFOAPK-YLTAETKRC-HADPAORLAFASIOR-VLRYVKRFLVMMNPEQAAADAAG-----AGPAVDYLDIEAQLLRRPEWENG-----VADVFPQMFAY
18408017.p CFCLTSVKNQSFSSASSRPTTED--PVL-YAEVLAEMEQDLKGTAPRSKFTTKADVYSFAMV-FELITCKVPEFEDNHLQGDKMAKNIRTAGRLFFFOAPK-YLTAETKRC-HADPAORLAFASIOR-VLRYVKRFLVMMNPEQAAADAAG-----AGPAVDYLDIEAQLLRRPEWENG-----VADVFPQMFAY
15238163.p CFCLTSVKNQSFSSASSRPTTED--PVL-YAEVLAEMEQDLKGTAPRSKFTTKADVYSFAMV-FELITCKVPEFEDNHLQGDKMAKNIRTAGRLFFFOAPK-YLTAETKRC-HADPAORLAFASIOR-VLRYVKRFLVMMNPEQAAADAAG-----AGPAVDYLDIEAQLLRRPEWENG-----VADVFPQMFAY
15223409.p CFCLTSVKNQSFSSASSRPTTED--PVL-YAEVLAEMEQDLKGTAPRSKFTTKADVYSFAMV-FELITCKVPEFEDNHLQGDKMAKNIRTAGRLFFFOAPK-YLTAETKRC-HADPAORLAFASIOR-VLRYVKRFLVMMNPEQAAADAAG-----AGPAVDYLDIEAQLLRRPEWENG-----VADVFPQMFAY
lias_TGFBR DLQ-LAVRHDSATIDDIAPNHRVGTKRMAPEVLLDSDIN--MKHFEFRRADLYAMGLVFEHAR-RCSTGGIHEDYQLPYDVLVPSD-----PSVEEM--RKVCEQKRLPNINRWQSCBALRV--MAKIMRECQYAN-----GAARLALR-----GAAITLSQL
17550630.w RRQKNKSVDSNVKDLITIDIMGNKPTCHVPEVSNGLNSNGHYEVANDLILYARSQKSTLIVSSKSTFSCRAIPPTIDNFPFPPPEGRSEHTYQVPSVENSNGSYKSVRKLQALKKYPSALLLQKIGEGKFMKECTIFGGKCAIKSTKEEDCVHGRALGDEIACLLQCGRRPRIVELFQVDESYNLLHEVY
32476378.b EVR-----KRSMSRSGVAEHSAGSFLSVDHDDRKEARKLGRKEIEAEVDS-----TPDATWFDQALVLLFLLALLIILVVAPEMNESEK-----MRNEABELLAQDTRSSMSQARISY--LEPMLAQFPDGEHSEWAAEQIDR-----VRVMEALHALTVKMN-----RNLPLONEAE

610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770
27080001.q RVMERKAAAGAVVAKDRASDSG-SDGNSLWGDDEASGSSSTATDASASSRPLDRSGSTRSSPPRKAIAAAKAGKCRSGIVTRLPKSSKITASSMSVTCAGPPQKRSMTVRRPPPVVARRTPRIKSDGHENRAAIPTTRRKSGGNASDSELA-----
AK107091.q RVMERKMS--NACRDRS-SDG-SDGNSLWGDDEASGSSSTATDASASSRPLDRSGSTRSSPPRKAIAAAKAGKCRSGIVTRLPKSSKITASSMSVTCAGPPQKRSMTVRRPPPVVARRTPRIKSDGHENRAAIPTTRRKSGGNASDSELA-----
18408017.p RIAEKEMKSNPNKENSDAEESVSESVVBEPTTTP-MYIKSLCLDAISEYSDTRSVYSEAPIKKTSALKKSGDITKRRNSISG--LRSPGSSPIKPRSTPKVSSPLSPFGRSSSNKANKDTRLELSPMSP--LSHGRRRLQTPGASDSELT-----
15238163.p RVLREKMNPN-NSKESSETSE--SESVSVVDDPPNAMI-TRDTKSLCLDTISEYSDTRSVYSEAPMKKVSALKKSGEAKLRRSPSLGSEKLRSGTSTVKARSSPKVS-PLSPFGR--SIKARKDNRLLELSPMSP--LTPGIRROQTGHASDSELT-----
15223409.p RVVERAKTCEKNDLREPSES--EWA-SCSDDEE-----GAGSDEQLSYAKE-----RRLSCSS--NDVGMKQVSNLLKRASSLKPQKPEIILISQYIYIGSLN--MNLVTCNFFVLCH-----
lias_TGFBR SQCEGKIKM-----
17550630.w GCRRNFMASEAPLDEFLVRIKDIYSAMAYLESIRIVHGHFTNNILMDGEFHAKVCSPRGSHHQLRYLAPESLVNNEFTIKSDAWAVATTVYEMAYQCRORPYEELNEQIVDNACALLDHQFNAAVHFMPTVFNIELLTLTRCFRVDDQLERPTFERLVKPFQD
32476378.b RLVAEAMRYET--FGDNATVYDKYSMITVLDGDEQYKPLVNLARNRIAQISQADINQTEAA-----RIITDRLEKADRMFVBSRTIARKIWSYIEBLYGSNAVEFLVATAQSLRAETSAGAAVDKLP-----